CONTENTS OF VOLUME 51

Volume 51 Nos. 1/2 May 1990

K. M. EVANS, R. A. GILL, and P. W. J. ROBOTHAM / The Source, Composition and Flux of Polycyclic Aromatic Hydrocarbons in Sediments of the River Derwent, Derbyshire, U.K. 1

K. M. EVANS, R. A. GILL, and P. W. J. ROBOTHAM / The Pah and Organic Content of Sediment Particle Size Fractions 13

GORDON McKAY and MURAD J. BINO / Simplified Optimisation Procedure for Fixed Bed Adsorption Systems 33

J. A. COOKE, S. M. ANDREWS, and M. S. JOHNSON / Lead, Zinc, Cadmium and Fluoride in Small Mammals from Contaminated Grassland Established on Fluorspar Tailings 43

J. A. COOKE, S. M. ANDREWS, and M. S. JOHNSON / The Accumulation of Lead, Zinc, Cadmium and Fluoride in the Wood Mouse (Apodemus sylvaticus L.) 55

ATHANASIA KOLIADIMA, EVANGELOS DALAS, and GEORGE KARAISKAKIS / Investigation of the Coagulation Mechanism of the Suspended Particulate Matter in Coastal Waters 65

R. A. STRIPP, M. HEIT, D. C. BOGEN, J. BIDANSET, and L. TROMBETTA / Trace Element Accumulation in the Tissues of Fish from Lakes with Different pH Values 75

EZZAT A. IBRAHIM / The Influence of the Herbicide Paraquat 'Gramaxon' on Growth and Metabolic Activity of Three Chlorophytes 89

NOEL D. URI and BENGT HYBERG / Stream Sediment Loading and Rainfall – A Look at the Issue 95

WOONG S. LEE, BORIS I. CHEVONE, and JOHN R. SEILER / Growth and Gas Exchange of Loblolly Pine Seedlings as Influenced by Drought and Air Pollutants 105

A. R. ABDEL-MOATI / Speciation and Behavior of Arsenic in the Nile Delta Lakes 117

B. CHAH and L. ZIKOVSKY / Seasonal Variation of Radon Daughters in Outdoor Air in Montreal 133

GIAN GUPTA and MICHAEL DOHERTY / Effect of Composting and Number of Flocks on Poultry Litter Extract Bod and Toxicity 139

M. SALIM AKHTER / Trace Metal Analysis of Sewage Sludge and Soils in Bahrain 147

STANISLAW DUDKA and ANNA CHLOPECKA / Effect of Solid-Phase Speciation on Metal Mobility and Phytoavailability in Sludge-Amended Soil 153

G. MAHINTHAKUMAR and S. VIGNESWARAN / Solute Transport through Saturated Soils: A Study of the Physical Non-Equilibrium Model 161

R. KELMAN WIEDER, MARIANNE N. LINTON, and KATHERINE P. HESTON / Laboratory Mesocosm Studies of Fe, Al, Mn, Ca, and Mg Dynamics in Wetlands Exposed to Synthetic Acid Coal Mine Drainage 181

Book Reviews

J. H. Vandermeulen and S. E. Hrudey, *Oil in Fresh Water: Chemistry, Biology, Countermeasure Technology* (T. VIRARAGHAVAN) 197

D. D. Mara and M. H. Marecos do Monte, *Waste Stabilization Ponds* (T. VIRARAGHAVAN) 197

J. Matsumoto and T. Matsuo, *Treatment, Disposal and Management of Human Wastes* (T. VIRARAGHAVAN) 198

M. E. De Souza, *Anaerobic Treatment in Tropical Countries* (T. VIRARAGHAVAN) 198

E. R. Hall and P. N. Hobson, *Anaerobic Digestion 1988* (T. VIRARAGHAVAN) 199

P. M. Huck and P. Toft, *Treatment of Drinking Water for Organic Contaminants* (T. VIRARAGHAVAN) 200
E. Merian, R. W. Frei, W. Härdi, and Ch. Schlatter (eds.), 'Carcinogenic and Mutagenic Metal Compounds' in *Current Topics in Environmental and Toxicological Chemistry* (B. Z. SIEGEL and S. M. SIEGEL) 200

Volume 51 Nos. 3/4 June 1990

ESPEN LYDERSEN, BRIT SALBU, ANTONIO B. S. POLEO, and IVAR P. MUNIZ / The Influences of Temperature on Aqueous Aluminium Chemistry 203
SAYED M. EL-SHAZLY, ABDELAZEEM M. ABDELMAGEED, and ABDELGALEEL ABDELAAL / Studies on Pollution in the Atmosphere near the Aluminium Reduction Plant at Nagi Hammady/Egypt 217
M. N. AZPIAZU, C. BUSTAMANTE, and J. M. MORQUILLAS / Effect of Air Preheating on Automotive Emissions 231
A. STONE, H. M. SEIP, S. TUCK, A. JENKINS, R. C. FERRIER, and R. HARRIMAN / Simulation of Hydrochemistry in a Highland Scottish Catchment using the Birkenes Model 239
J. P. BAUDIN, A. F. FRITSCH, and J. GEORGES / Influence of Labelled Food Type on the Accumulation and Retention of ^{60}Co by a Freshwater Fish, *Cyprinus carpio* L. 261
SARITA SINHA and PRAKASH CHANDRA / Removal of Cu and Cd from Water by *Bacopa monnieri* L. 271
R. J. KOHUT, J. A. LAURENCE, R. G. AMUNDSON, R. M. RABA, and J. J. MELKONIAN / Effects of Ozone and Acidic Precipitation on the Growth and Photosynthesis of Red Spruce After Two Years of Exposure 277
G. R. SOUTHWORTH / PCB Concentrations in Stream Sunfish (*Lepomis Auritus* and *L. Macrochirus*) in Relation to Proximity to Chronic Point Sources 287
M. V. RAO and P. S. DUBEY / Explanations for the Differential Response of Certain Tropical Tree Species to SO_2 under Field Conditions 297
RICCARDO RIFFALDI, ALESSANDRO SAVIOZZI, and RENATO LEVI-MINZI / Retention of Coumaric Acid by Soil and Its Colloidal Components 307
STEVEN W. EFFLER, SUSAN M. DOERR, CAROL M. BROOKS and H. CHANDLER ROWELL / Chloride in the Pore Water and Water Column of Onondaga Lake, N.Y., U.S.A. 315
H. JETSKE VAN RHEINECK LEYSSIUS, FRANK A. A. M. DE LEEUW, and BERT H. KESSEBOOM / A Regional Scale Model for the Calculation of Episodic Concentrations and Depositions of Acidifying Components 327
CH. LANZERSTORFER and H. PUXBAUM / Volatile Hydrocarbons in and around Vienna, Austria 345
FRANK A. A. M. DE LEEUW and H. JETSKE VAN RHEINECK LEYSSIUS / Modeling Study of SO_x and NO_x Transport during the January 1985 Smog Episode 357
GLEN W. STATTON / Effects of the Herbicide Glyphosate on Nitrification in Four Soils from Atlantic Canada 373
Announcements 385
Volume Contents 389